## **BIO-DATA IN BRIEF**

Name : Dr. Raja Kishor Duggirala

**Father's Name** : (Late) Prof. D. Visweswaram

**Designation** : Professor

**Date of Birth** : 28-04-1969

Age & Sex : 55 Years and Male

**Presently working as** : Professor,

Department of Computer Science Engineering,

Dr. Lankapalli Bullayya College of Engineering,

52-14-75, Resapuvanipalem,

Visakhapatnam - 350013.

**Address for Contact** : 6-20-6, East Point Colony,

Visakhapatnam-530017.

Mobile: 8008 2646 90

e-Mail: rajakishor@gmail.com

**Academic Qualifications**: Ph.D. (Computer Science Engineering)

M.Tech. (Computer Science & Tech.)

M.Sc. (Statistics)

P.G. Diploma in Methods and Programming

B.A. (Mathematics, Economics, Statistics)

**Teaching Experience** : 23 Years of PG, UG and Engg. Teaching

**Industry Experience** : 1 Year

**Vidwan ID** 373991

**Memberships** : Life Member of computer Society of India

Member, Advisory Panel for Telugu Language (2018-21), National Book Trust, India, Ministry of Human Resource Development, Govt. of India.

Journal Publications : 6 International

**Conferences** : 2 International

**Book Chapters** : 2

Please see resume for details.

## **RESUME**

# Dr. Raja Kishor Duggirala

6-20-6, East Point Colony, Visakhapatnam - 530017. (Andhra Pradesh) India

> Mobile: 8008264690 E-mail: rajakishor@gmail.com



## **Academic Qualifications**

- **Ph.D.** (Awarded in December, 2017)
  Department of Computer Science Engineering, JNTUH, Hyderabad.
- M.Tech. (Computer Science and Technology), August, 1998. Passed with distinction (secured 72% of marks).
   Engineering College, Andhra University, Visakhapatnam, Andhra Pradesh (A.P.)
- M.Sc. (Statistics), June, 1993. Obtained first class with 61% of marks. College of Science and Technology, Andhra University, A.P.
- P.G. Diploma in Methods and Programming, December, 1992. Passed with distinction (secured 82% of marks) and stood 1<sup>st</sup> in Visakhapatnam branch.

  Andhra Pradesh Productive Council.
- B.A. (Mathematics, Economics, Statistics), June, 1990. Obtained first class with 66% of marks.
   B.V.K. Degree College, Andhra University, Visakhapatnam, A.P.

## Ph.D. Research Topic

Intelligent Hybridization of Expectation Maximization, K-Means and Fuzzy C-Means Algorithms.

#### **Areas of Interest**

Data Mining, Neural Networks, Fuzzy Logic, Genetic Computing, Data Structures, Distributed Systems, Theory of Computation, Probability Theory.

## **Software Skills**

**Languages** C, C++, Java, Python

Advanced Java - JDBC,

FORTRAN, Pascal, COBOL, BASIC, LOGO

Math Tools MatLab, SciLab

**Designing Tools** RAPTOR

**Database Languages** SQL, PL/SQL **Data Mining Tools** WEKA, Orange

**Databases** Oracle, dBase, FoxPro

**Operating Systems** Windows NT, Windows XP, Unix, DOS

**GUI** Developer 2000, Visual Basic

Web Technology HTML

## **Experience**

# Teaching: 23 Years of P.G., U.G. & Engg. Teaching (Taught for the students of B.Tech, M.Tech, M.C.A., M.Sc. (Computer Science), B.Sc. (Special), B.C.A. and O' Level)

- From 5<sup>th</sup> July, 2018 till date: **Professor**, Dept. of Computer Science Engineering, Dr. Lankapalli Bullayya College of Engineering, Resapuvanipalem, Visakhapatnam, A.P.
- From 15<sup>th</sup> June, 2009 18<sup>th</sup> June, 2016: **Professor**, Dept. of Computer Science Engineering, Avanthi Institute of Engineering & Technology, Cherukupalli, Vzm Dist., A.P.
- From 1<sup>st</sup> Feb, 2008 12<sup>th</sup> September, 2014: **Head of the Department**, Department of Computer Science Engineering, Avanthi Institute of Engineering & Technology, Cherukupalli, Vzm Dist., A.P.
- From 15<sup>th</sup> Dec, 2006 14<sup>th</sup> June, 2009: **Associate Professor**, Dept. of Computer Science Engineering, Avanthi Institute of Engineering & Technology, Cherukupalli, Vzm Dist., A.P.
- 2007 2014: Guest Faculty for M.Tech programme (CSE, IT AND SE branches) at Avanthi Institute of Engineering and Technology, Makavarapalem, Visakhapatnam (Dist).
- From 29<sup>th</sup> Aug, 2005 1<sup>st</sup> Dec, 2006: **Associate Professor**, Department of Computer Science, Gayatri Vidya Parishad College for Degree and P.G. Courses, Visakhapatnam, A.P.
- From 2<sup>nd</sup> June, 1999 28<sup>th</sup> Aug, 2005: **Asst. Professor**, Department of Computer Science, Gayatri Vidya Parishad College for Degree and P.G. Courses, Visakhapatnam, A.P.
- 1995 1996: Trained students appearing for O' level (a P.G. Diploma course) examinations, conducted by Department Of Electronics, Government of India.
- 1993 1994: Computer Programmer, Mrs. A.V.N. Degree College, Visakhapatnam, A.P.

# Subjects Taught: (Taught various subjects to the students of M.Tech, B.Tech, MCA, M.Sc. (CS), BCA, B.Sc. (Special))

Data Mining, Neural Networks, Fuzzy Logic, Secured Database Application Development, Design of analysis and algorithms, Data structures, Distributed database systems, Theory of computations, Artificial Intelligence, Systems Programming, Compiler Design, Computer Organization, Microprocessors, DBMS, Cryptography, Operating systems, File structures, Object-oriented programming, Software Engineering, Object-Oriented Software Engineering, UML, Information Systems Auditing, Software Process Management, Data Communication, Oracle with Developer/2000, C, C++, Java, Discrete mathematical structures, Probability & Statistics, Operations research.

## **Industry:**

Worked as System Analyst in Eastern Chemicals Pvt. Ltd. from 25-02-1995 to 29-03-1996 and developing various software packages.

## **Iournal Publications:**

- D. Raja Kishor and N.B. Venkateswarlu (2016), Hybridization of Expectation-Maximization and K-Means Algorithms for Better Clustering Performance, Cybernetics and Information Technologies (ISSN: 1314-4081), Vol. 16, No. 2, pp. 16-34, DOI: 10.1515/cait-2016-0017, Web-link: <a href="https://sciendo.com/article/10.1515/cait-2016-0017">https://sciendo.com/article/10.1515/cait-2016-0017</a>.
- 2. Duggirala Raja Kishor and N.B. Venkateswarlu (2016), A Novel Hybridization of Expectation-Maximization and K-Means Algorithms for Better Clustering Performance, International Journal of Ambient Computing and Intelligence (IJACI), (ISSN: 1941-6237). Vol. 7, No. 2, pp. 49-73, DOI: 10.4018/IJACI.2016070103, Weblink: <a href="https://www.igi-global.com/gateway/article/160125">https://www.igi-global.com/gateway/article/160125</a>.
- 3. Raja Kishor Duggirala (2020), COVID-19 Prediction Using Deep Learning Techniques, Webology (ISSN: 1735-188X), Vol, 17, No. 4, pp. 591-600, Web-link: <a href="https://www.webology.org/data-cms/articles/">https://www.webology.org/data-cms/articles/</a> 20231114012026pmWEBOLOGY%2017%20(4)%20-%2054.pdf
- 4. Raja Kishor Duggirala (2021), Applying Regression Models For Covid-19 Analysis, Webology (ISSN: 1735-188X), Vol. 18, No. 4, pp. 3322-3327, Web-link: <a href="https://www.webology.org/data-cms/articles/20231114012232pmWEB0L0GY%2018%20(4)%20-%20267.pdf">https://www.webology.org/data-cms/articles/20231114012232pmWEB0L0GY%2018%20(4)%20-%20267.pdf</a>
- 5. Raja Kishor Duggirala (2021), Covid-19 Prediction And Detection Using Convolution Neural Networks, Webology (ISSN: 1735-188X), Vol. 18, No. 6, pp. 9218-9240, Weblink: <a href="https://www.webology.org/data-cms/articles/20231114012514pmWEBOLOGY%2018%20(6)%20-%20159.pdf">https://www.webology.org/data-cms/articles/20231114012514pmWEBOLOGY%2018%20(6)%20-%20159.pdf</a>
- 6. Raja Kishor Duggirala (2022), COVID-19 Analysis Using Bigdata Algorithms, European Chemical Bulletin (ISSN: 2063-5346), Vol. 11, No. 12, pp. 2403-2413, Web-link: <a href="https://www.eurchembull.com/uploads/paper/22b9bc0991bb7b2252ccefacbb3e6dc9.pdf">https://www.eurchembull.com/uploads/paper/22b9bc0991bb7b2252ccefacbb3e6dc9.pdf</a>

## **Book Chapters:**

- 1. Raja Kishor Duggirala (2022). Fuzzy Perceptron Learning for Non-Linearly Saparable Patterns, Data Clustering, IntechOpen, ISBN 978-1-83969-888-0, DOI: http://dx.doi.org/10.5772/intechopen.101312.
- 2. Raja Kishor Duggirala (2020). Segmenting Images Using Hybridization of K-Means and Fuzzy C-Means Algorithms [Online First], Introduction to Data Science and Machine Learning, IntechOpen, ISBN 978-1-83880-334-6, DOI: 10.5772/intechopen.86374. Available from: <a href="https://www.intechopen.com/online-first/segmenting-images-using-hybridization-of-k-means-and-fuzzy-c-means-algorithms">https://www.intechopen.com/online-first/segmenting-images-using-hybridization-of-k-means-and-fuzzy-c-means-algorithms</a>

## **Invited Lectures/Resource Person/Conference/Workshops/FDPs:**

1. D. Raja Kishor and N.B. Venkateswarlu (2016), A Behavioral Study of Some Widely Employed Partitional and Model-Based Clustering Algorithms and their Hybridizations, Paper presented at 1<sup>st</sup> International Conference on Data Engineering and Communication Technology (ICDECT-2016), Aspire Research Foundation, Pune,

- India, 10-11, March, 2016.
- 2. Participated and presented a paper on "Identifying Project Risks and Assessing Software Quality" at ETA-2005, a National Conference on Emerging Technologies & Applications organized by Computer Science Department of Sourashtra University, Rajkot and Amoghsiddhi Educational Society, Sangli, 1-2 October, 2005.
- 3. Gave a technical presentation on **Research Opportunities and Research Schemes** in a five-day Workshop on "Accreditation Process and Outcome Based Education for Quality Improvement in Teaching, Learning and Research", Organised by the IQAC cell, Dr. Lankapalli Bullayya College of Engineering, Visakhapatnam, during 18<sup>th</sup> June to 1<sup>st</sup> July, 2023.
- 4. Gave a talk on **Frontiers and Challenges in IT Research** in a three-day online Faculty Development Program on "Research Initiatives in Information Technology" organized by Department of Computer Science Engineering, Dr. Lankapalli Bullayya College of Engineering, Visakhapatnam, 01-03 June, 2020.

## **Projects Developed:**

- 1995 1996: Developed package for Salary System and Mailing Addresses for Eastern Chemicals Pvt. Ltd., Visakhapatnam, A.P.
- 1995 1996: Worked for Integration of Total Package (Accounting System) with the Vendor Data Bank, Inventory, generation of reports for Excise, Sales Tax Departments etc. for Eastern Chemicals Pvt. Ltd., Visakhapatnam, A.P.
- 1995 1996: Developed package for Monitoring Order Book (viz.: procurement, execution and market share for various products region wise) for Eastern Chemicals Pvt. Ltd., Visakhapatnam, A.P.
- 1993 1994: Developed software for various college programmes like admissions, salaries, examination schedules etc. in Mrs. A.V.N. Degree College, Visakhapatnam, A.P., which continues to be use till date.

## Workshops, Refresher Courses & Faculty Development Program attended:

- 1. Attended a five-day Workshop on "Accreditation Process and Outcome Based Education for Quality Improvement in Teaching, Learning and Research", Organised by the IQAC cell, Dr. Lankapalli Bullayya College of Engineering, Visakhapatnam, during 28th June to 1st July, 2023.
- 2. Attended a five-day International Online Faculty Development Program on "Education 4.0 Digital Teaching and Learning", organized by Department of Civil Engineering, Dr. Lankapalli Bullayya College of Engineering, Visakhapatnam, from 31st August to 4th September, 2020.
- 3. Attended a three-day online faculty development program on "Research Initiatives in Information Technology" organized by Department of Computer Science Engineering, Dr. Lankapalli Bullayya College of Engineering, Visakhapatnam, 01-03 June, 2020.
- 4. Attended a three-day refresher course on "Essential Foundations for Teaching and Researching Artificial Neural Networks" conducted at Aditya Institute of Technology And Management, Tekkali, 08-10 Jan, 2010.
- 5. Attended a three-day refresher course on "Research Methodologies in Engineering:

- Current Perspective and Prospectus" conducted at Aditya Institute of Technology And Management, Tekkali, 23-25 August, 2008.
- 6. Attended a three-day workshop on "Data Warehousing and Business Intelligence" jointly organized by TCS and Department of CSE, J.N.T.U. at Kakinada during 9-11 January, 2008.
- 7. Participated in a two-day refresher course on "WEKE: A Data Mining Tool" organized by Aditya Institute of Technology And Management, Tekkali, 28-29 December, 2007.
- 8. Attended a three-day Workshop on "Mathematical Foundations for Data Mining Research" organized by Rajiv Information Technology & Computer Hitech Centre, Visakhapatnam, 29-31 December, 2006.
- 9. Attended a National Workshop on "Data Engineering", organized by the Dept. of Computer Sciences & Systems Engg., A.U., 29-30, November, 2006.
- 10. Attended a FDP on "DB2 Fundamentals" jointly organized by IBM and the Dept. of Computer Science & Systems Engg., A.U., 11<sup>th</sup> 13<sup>th</sup>, June, 2006.

## **Seminars attended:**

- 1. Attended a webinar on "How to Produce Effective Online Teaching Content with Screen Casting" organized by Department of Computer Science Engineering, Dr. Lankapalli Bullayya College of Engineering, Visakhapatnam, 24<sup>th</sup> August, 2020.
- 2. Attended an AICTE sponsored three-day national seminar on "Frontiers in Classification Algorithms for Data Mining" conducted by Aditya Institute of Technology and Management, Tekkali, 26-28 December, 2008.
- 3. Attended a two-day national seminar on "Soft Computing & Its Applications" conducted by Anil Nirukonda Institute of Technology & Science, Visakhapatnam, 21-22 December, 2007.

#### **Academic Activities:**

- In-charge, Research Forum, Dept. of CSE, Dr. Lankapalli Bullayya College of Engineering (for Women), Visakhapatnam, from 21-11-2019 to till date.
- Member, NAAC Co-Ordinator's Committee, Dept. of CSE, Dr. Lankapalli Bullayya College of Engineering (for Women), Visakhapatnam, during 2019-20.
- Faculty advisor for *Technogenes*, a weekly bulletin from department of CSE, Avanthi Institute of Engineering & Technology, Cherukupalli (V), Vizianagaram (Dist), during 2009-10.
- Faculty advisor for *Bits & Bytes*, a weekly bulletin from department of M.C.A., Gayatri Vidya Parishad Degree and P.G. College, Rushikonda, during 2005-06.
- Faculty in-charge for *Samhitha*, a literature club organized by M.C.A. students, Gayatri Vidya Parishad Degree and P.G. College, during 2005-06.

## **Society Membership:**

• Life Member of Computer Society of India.

• Member, Advisory Panel for Telugu Language (2018-21), National Book Trust, India, Ministry of Human Resource Development, Govt. of India.

## **Major Projects Guided:**

No. MCA Projects : 37 No. of B.Tech Projects : 20

#### **Technical Activities**

- 1. Gave a presentation on **Essentials of Programming Skills** in a technical session organized NDLI Club activity by the department of Computer Science Engineering, Dr. Lankapalli Bullayya College of Engineering, Visakhapatnam, for the students of B.Tech (CSE) 2<sup>nd</sup> year on 27<sup>th</sup> March, 2024.
- 2. Gave a technical presentation on **Computational Intelligence** in the department forum meeting, Dept. of CSE, Dr. Lankapalli Bullayya College of Engg. Visakhapatnam, on 7<sup>th</sup> May, 2022.
- 3. Gave a talk on **Essentials of Matrix Algebra for Data Science** for 3 sessions of an Add-on program on "Data Science" for 3.2 CSE (sections A & B) during September, 2021 to March, 2022, organized by Department of Computer Science Engineering, Dr. Lankapalli Bullayya College of Engineering, Visakhapatnam.
- 4. Gave a technical presentation on **A Comparative Study of Distance Measures Using K-Means Clustering Algorithm**, in the Research Forum, Dept. of CSE, Dr. Lankapalli Bullayya College of Engineering College (for Women) on 31st January, 2020.
- 5. Designed an Add-On course for "Foundation Course for Essential Programming Skills" (a four-week programme) and conducted classes for 2<sup>nd</sup> year B.Tech (CSE-B) students during July-August, 2019.
- 6. Conducted a 3-hour training session for technical round of Industry Recruitment Drives for the students of B.Tech (ECE-B 4<sup>th</sup> Year) in Dr. Lankapalli Bullayya college of Engineering (for Women) on 25<sup>th</sup> July, 2019,
- 7. Conducted a 3-hour training session for technical round of Industry Recruitment Drives for the students of B.Tech (ECE-A 4<sup>th</sup> Year) in Dr. Lankapalli Bullayya college of Engineering (for Women) on 24<sup>th</sup> July, 2019.
- 8. Conducted a 2-hour training session for technical round of Industry Recruitment Drives for the students of B.Tech (EEE 4<sup>th</sup> Year) in Dr. Lankapalli Bullayya college of Engineering (for Women) on 24<sup>th</sup> July, 2019
- 9. Conducted a training session for technical round of Industry Recruitment Drives for the students of B.Tech (CSE-B  $4^{th}$  Year) in Dr. Lankapalli Bullayya college of Engineering (for Women) on  $20^{th}$  July, 2019,
- 10. Gave an orientation talk on "**Proposals for Research Project and other research activities**", in a Faculty Forum meeting on 26<sup>th</sup> June 2019, organized in the dept. of Computer Science Engineering, Dr. Lankapalli Bullayya College of Engineering (for Women), Visakhapatnam.
- 11. Designed an Add-On course for "Foundation Course for Essential Programming Skills" (a four-week programme) and conducted classes for 2<sup>nd</sup> year B.Tech (CSE) students in February, 2019, Dr. Lankapalli Bullayya College of Engineering (for Women),

- Visakhapatnam.
- 12. Gave a talk on "Placement Orientation" to the students of B.Tech (CSE 2<sup>nd</sup> Year) in Dr. Lankapalli Bullayya College of Engineering (for Women) on 5-12-2018.
- 13. Gave a talk on "Placement Orientation" to the students of B.Tech (CSE 3<sup>rd</sup> Year) in Dr. Lankapalli Bullayya College of Engineering (for Women) on 1-12-2018.

## **Other Activities**

#### **Invited Talks**

- 1. Gave a talk on "Plastic Pollution" at a meeting organized by Visakha Sahiti on 05-06-2024.
- 2. Gave a talk on "Environment Protection" at a meeting organized by *Visakha Sahiti* on 05-06-2023.
- 3. Gave a talk on "Environment Protection" at *Advitiya-3*, a two-day technical fest organized at Baba Institute of technology and Sciences, PM Palem, Visakhapatnam during 6-7 July, 2022.
- 4. Gave a talk on "Importance of Bharatiya Education" on 05-09-2021, in a webinar organized by Bharatiya Vijnan Mandal, A.P. branch.
- 5. Gave a 4-Day seminar talks on "School Education" of National Education Polivy conducted for the teachers of Bharatiya Vidya Kendram schools, Andhra Pradesh, during 7-10, June, 2021.
- 6. Gave a talk on "Environment Protection" in an online conference conducted by *Vidya Vikasa Samithi*, Andhra Pradesh, on the occasion of World Environment Day, on 5<sup>th</sup> June, 2020.
- 7. Gave an interview on "Biodiversity" for Nijam Today, on the occasion of World Environment Day, on 5<sup>th</sup> June, 2021.
- 8. Gave a talk on "Environment Protection" in an online National Seminar on Environment, Water and Biodiversity Conservation in India with Special to Andhra Pradesh State, organized by Andhra Pradesh State Biodiversity Bourd on 11-01-2021.
- 9. Gave a talk on "Environment Protection" in an online conference conducted by *Prajna Bharathi*, Karimnagar, on the occasion of World Environment Day, on 5<sup>th</sup> June, 2020.
- 10. Gave an interview on "Environment Protection" for Nijam Today, on the occasion of World Environment Day, on 5<sup>th</sup> June, 2020.
- 11. Gave a talk on "Environment Protection" in a meeting organized by the Prema Samajam at Chodavaram 25<sup>th</sup> December, 2019.
- 12. Presented a paper on "Professional Education" in a seminar on "New Education Policy 2019" organised by Bharatiya Shikshan Mandal on 18-08-2019 in Visakhapatnam.
- 13. Gave a talk on "Environment Protection" at Vijnan Institute of Engineering for Women on 18-07-2019.
- 14. Gave a talk on "Environment Protection" in a meeting organized by the Rotary Club at Vizianagaram on 4th June, 2019.

- 15. Giving a series talks on "Environment Protection" from May 2019, for MyIndMedia, an internet radio, operates from Washington DC, USA.
- 16. Gave a talk on "Environment" at the Summer camp for the high school level students conducted by Vijnana Vihara Residential School, Gudilova, (Visakhapatnam Dist.) on 9<sup>th</sup> May, 2019.
- 17. Gave a talk on "Importance of Bharatiya Education" on 25-11-2018, in the Workshop on 'Rural Education' organized by Mahatma Gandhi National Council for Rural Education, an apex body of Department of Higher Education, Ministry of Human Resource Development, Government of India. The workshop was organized during 24-30 November, 2018, in the Institute of Advanced Studies of Education, Andhra University, Visakhapatnam.
- 18. Gave a talk on "Environment Protection" on the occasion of Silver Jubilee celebrations of *Kalavedika*, a Cultural and Social Welfare Trust (Visakhapatnam) on 10-11-2018.
- 19. Gave a talk on "Environment" at the summer camp for the teachers conducted by Vijnana Vihara Residential School at Gudilova (Visakhapatnam Dist.) during 8-9 June, 2018.
- 20. Gave a talk on "Environment" at the Summer camp for the high school level students conducted by Vijnana Vihara Residential School, Gudilova, (Visakhapatnam Dist.) in the month of May, 2018.
- 21. Gave a talk on "Teacher and Guru" at the two-day state level teachers' training camp organized by Andhra Pradesh Upadhyaya Sangham (APUS) at Anantagiri (Araku) during 29-30 April, 2018.

#### **Books Authored**

- 1. "Plastic Guppitlo Bhugolam", a book on plastic pollution in Telugu, published in July, 2023.
- 2. "Bharatadeshamu Vivekanandudu", a book on Swami Vivekananda in Telugu, published in March, 2022.
- 3. "Pada Munduku", a collection of motivational essays in Telugu, published in September, 2021.
- 4. "Paryavaranama? Paryamaranama?", a book on Environment protection in Telugu, published in March, 2019. This book was also translated into Kannada language and is sponsored for publication by Kuvempu Bhasha Bharathi Pradhikara, a literary body of Karnataka State Government for translations.
- 5. "Kathasudha-1", a collection of motivational stories in Telugu, published in July, 2018.

## **Achievements**

Won first prize in the state-level inter-college Sanskrit elocution competition, S.K.B.R. Degree College, Amalapuram, 1990.

#### **Hobbies**

Wide reading, journalism, music, and elocution-debate.

#### **Communication Skills**

Good written and oral communication.